

PATENT**REMARKS**

Claims 1-41 are pending in the present application, of which claims 1, 15, 17, 24, 39, 40, 41 are independent. No amendments have been made. Applicants believe that the present application is in condition for allowance, which prompt and favorable action is respectfully requested.

I. REJECTION UNDER 35 U.S.C. §102**A. Claims 1, 39 and 40**

The Examiner rejected claims 1, 39 and 40 under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 6,049,548 (hereinafter "Bruno"). The rejection is respectfully traversed in its entirety.

Claim 1 recites, amongst other things, "selecting one contention-based random access channel from among at least two contention-based random access channels." Bruno discloses "FIGS. 2A and 2B that illustrate the state diagram for the MU transceiver with multi-access data transfer protocols of the ALOHA type and the CS-P/CD-E type covered by the invention, respectively." (Col. 3, ll. 15-18). However, it should be noted that these are independent protocols that implement various features of Bruno. Specifically, there is no teaching or disclosure in Bruno that these may be used simultaneously. Therefore, for at least this reason, claim 1 is allowable over Bruno.

Claim 39 and 40 include recitations similar to claim 1 and are allowable, for at least the same reasons as stated with respect to claim 1.

B. Claims 1-11 and 15-41

The Examiner rejected claims 1-11 and 15-41 under U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 5,638,369. (hereinafter "Ayerst"). The rejection is respectfully traversed in its entirety.

Claim 1 recites, amongst other things, "selecting one contention-based random access channel from among at least two contention-based random access channels based on the current operating state" of "a terminal." This recitation is not taught or disclosed by Ayerst.

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Ayerst discloses that at "step 830, the type of inbound message is determined by the processing system 710," and when "the type is "scheduled" at step 830, the inbound message is transmitted at step 855 using the scheduled inbound channel at the scheduled time slot." (Col. 17, ll. 27-32). However, when "the type is not scheduled" then "the processing system 710 determines further whether the outbound frame 330 in which the last ALOHA channel identifier or protocol separation identifier has the same frame number as the inbound frame in which the inbound message is generated for transmission at step 835." (Col. 17, ll. 32-40). If "it is the same frame number as the inbound frame in which the inbound message is generated at step 830, the transmission of the inbound message is delayed by the processing system 710 at step 840 until the next inbound frame 530." (Col. 17, ll.43-46) If it is "determined not to have the same frame number as the inbound frame in which the inbound message is generated at step 835, or when the message has been delayed at step 840, one of the inbound channels in the ALOHA subset is chosen randomly at step 845 by the processing system 710, and the inbound message is then transmitted at a time slot determined by the processing system 710 in the ALOHA portion 450, 518 of the randomly selected channel using an ALOHA technique at step 850". (Col. 17, ll.49-57). In the above embodiment of Ayerst, a determination is made as to a message type, scheduled with results in transmission during a scheduled channel or unscheduled which results in transmission in a *random* ALOHA channel in a frame. Therefore, Ayerst discloses selecting either a scheduled channel or a *random* ALOHA channel for transmission.

As discussed above, Ayerst allows for transmission in a random ALOHA channel and claim 1, which recites "selecting one contention-based random access channel from among at least two contention-based random access channels based on the current operating state" of "a terminal," is allowable over Ayerst.

Claims 2-11 depend from claim 1 and are allowable for, at least, the same reasons as discussed with respect to claim 1.

Moreover, claim 2 recites that "the at least two random access channels include a first random access channel used by registered terminals for system access and a second random access channel used by registered and unregistered terminals for system access." Ayerst discloses a plurality of ALOHA channels, e.g. time slots 450 of Figs. 4 and 5. However, Ayerst

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does not disclose that any of the time slots 450 are reserved for any particular type of traffic, pilot, or requests. Therefore, claim 2 is independently allowable over Ayerst.

Moreover, claim 4 recites that "the current operating state is indicative of whether or not the terminal has registered with the system." As discussed with respect to claims 1 and 2, Ayerst allows for transmission in a random ALOHA channel and does not reserve the ALOHA time slots for any particular traffic type. Therefore, for at least these reasons, claim 3 is independently allowable.

Moreover, claim 5 recites that "the current operating state is indicative of whether or not the terminal can compensate for propagation delay to an access point receiving the message." As discussed with respect to claim 1, Ayerst discloses determining an identifier of the frame in which a ALOHA channel identifier was received in determining what frame to transmit an ALOHA transmission. It does not select a random access channel based upon "whether or not the terminal can compensate for propagation delay to an access point receiving the message," as recited in claim 5. Therefore, for at least this reason, claim 5 is independently allowable.

Moreover, claim 6 recites that "the current operating state is indicative of whether or not a particular received signal-to-noise ratio (SNR) is achieved for the terminal." There is no teaching or disclosure in Ayerst regarding calculation of SNR. Therefore, for at least this reason, claim 6 is independently allowable.

Claim 15 recites, amongst other things that "if the terminal is registered, transmitting a first message on a first contention-based random access channel to access the system," and "if the terminal is unregistered, transmitting a second contention-based message on a second random access channel to access the system." As discussed above, Ayerst discloses that "the type of inbound message is determined by the processing system 710," and when "the type is "scheduled" at step 830, the inbound message is transmitted at step 855 using the scheduled inbound channel at the scheduled time slot." (Col. 17, ll. 27-32). This indicates that scheduled messages are transmitted on scheduled channels, e.g. 430, while access requests are "transmitted at a time slot determined by the processing system 710 in the ALOHA portion 450, 518 of the randomly selected channel using an ALOHA technique at step 850". (Col. 17, ll. 55-57). Therefore, access requests regardless of the type of terminal are transmitted in a random ALOHA channel. Therefore, for at least this reason, claim 15 is allowable over Ayerst.

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Claim 16 depends from claim 15 and is allowable for, at least, the same reasons as discussed with respect to claim 15.

Claim 17 recites "processing a first contention-based random access channel used by registered terminals to access the system," and processing a second contention-based random access channel used by registered and unregistered terminals to access the system." As discussed with respect to claim 2, Ayerst discloses a plurality of ALOHA channels, e.g. time slots 450 of Figs. 4 and 5. However, Ayerst does not disclose that any of the time slots 450 are reserved for any particular type of traffic, pilot, or requests. Therefore, claim 17 is allowable over Ayerst.

Claims 18-23 depend from claim 17 and are allowable for, at least, the same reasons as discussed with respect to claim 17.

Claim 24 includes recitations similar to claim 17 and is allowable, for at least the same reasons as stated with respect to claim 17.

Claims 25-38 depend from claim 24 and are allowable for, at least, the same reasons as discussed with respect to claim 24.

Claim 39 and 40 include recitations similar to claim 1 and are allowable, for at least the same reasons as stated with respect to claim 1.

Claim 41 includes recitations similar to claim 17 and is allowable, for at least the same reasons as stated with respect to claim 17.

II. REJECTION UNDER 35 U.S.C. §103

The Examiner rejected claims 12-14 under 35 U.S.C. §103(a) as being unpatentable over Ayerst either individually or in combination with another reference. Claim 12-14 depend from claim 1, and are allowable for, at least, the same reasons as stated with respect to claim 1.


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REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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